REMARKS

Claims 1-21 and 32-45 are pending in this application. Claims 1-2, 7, 15, 19, 37-39, and 44 are amended herein.

Claims 1, 15 and 44 are independent.

Claims 1-2, 7, 15, 19, and 44 are amended solely for clarification and not to overcome any rejection. Claim 38 is amended solely to delete unnecessary limitations. Claim 37, which depends from independent claim 1, and claim 39, which now depends from independent claim 15, are rewritten to recite features relating to the generation of the data stored at different resolutions.

Claims 1-2 and 15 stand rejected under 35 USC §102(e) as anticipated by Coiner (U.S. Patent No. 5,638,273). Claim 3 stands rejected under 35 USC §103(a) as obvious over Coiner in view of Yamawaki (U.S. Patent No. 5,446,659). The rejections are respectfully traversed.

Claim 1 requires a control processor operative to store image data in the memory wherein each image represented by the stored image data associated with a portion of the time closer to an event has a first image resolution and each image represented by the stored data associated with a portion of the time period further from the event has a second resolution different than the first image resolution.

As described in the referenced text, Coiner samples data at a constant frequency, but stores normal operating data at one frequency and incident data at another higher frequency. It is noted that the data to which Coiner refers is an operational parameter such as engine temperature, vehicle speed or break activation. For example, if the data is temperature data, the periodicity at which this data is sampled could be every four seconds. However, according to Coiner while the temperature is normal the periodicity at which this data is stored could be set

at twelve seconds. When the temperature exceeds a particular threshold the periodicity at which the data is stored could be increased to say four seconds. Hence all the sampled data at a particular time interval, e.g. at a twelve second interval or at a four second, is stored. Hence, what Coiner categorizes as "resolution" has nothing to do with "resolution", as described and claimed in the present application.

It is further noted that nowhere in the reference text does Coiner discuss or in anyway disclose his data to be image data. Accordingly, Coiner does not in anyway suggest that data associated with time intervals in relation to an event should, or for that matter could, have different image resolutions. In fact Coiner has not and has no need to be concerned with image resolution, since Coiner has no images.

In view of the above, Coiner also lacks required limitations claim 15, which require storing first image data associated with a time period closer to an event, with each image represented by the stored first image data having a first image resolution, and storing second image data associated with a time period further from the event, with each image represented by the stored second image data having a second image resolution different than the first image resolution.

Claim 2 requires one sensor type to generate data and another sensor type to generate a signal representing an event. The referenced sections of Coiner disclose multiple data sensor but no sensor for generating a signal representing an event. Rather, according to other portions of the reference, Coiner discloses that the sensed data is thresholded by the processor to determine whether or not an event has occurred. Accordingly, Claim 2 is further and independently distinguishable.

Yamawaki lacks any discussion whatsoever of image data, and accordingly does not cure the defects in Coiner. Furthermore,

with regard to Claim No. 3, it is unclear how or why one would utilize Yamawaki's accelerometer with the Coiner device as proposed by the Examiner. More particularly, Yamawaki discloses a sensor which generates acceleration data and a control processor which thresholds such data to determine if an event has occurred. This is similar to Coiner's sensors and processor. Accordingly, neither system uses a sensor to generate a signal representing an event.

Further still, using Yamawaki's acceleration sensor as an event sensor in Coiner would result, for example, in unnecessarily storing additional temperature information even though the vehicle was at normal operating temperature, and hence would be contrary to Coiner's objectives.

Claims 1-2, 4-8, 10-12, 15-19 and 36-39 stand rejected under 35 USC §102(e) as anticipated by Nishijima (U.S. Patent No. 5,915,069). Claims 9, 20-21, 32-35, and 40-43 stand rejected under 35 USC §103(a) as obvious over Nishijima. Claims 13-14, stand rejected under 35 USC §103(a) as being obvious over Nishijima in view of Freeman (U.S. Patent No. 6,002,808) and Chow (U.S. Patent No. 5,016,633). The rejections are respectfully traversed.

Traversal arguments directed to prior rejections based upon the same applied prior art and art combination (including those submitted in the previously filed Appeal Brief) are reasserted herein in their entirety.

As previously discussed in detail in responses to prior Official Actions (including in the previously submitted Appeal Brief), compression and resolution are entirely different attributes. This is also made clear in the present specification and is well understood by those skilled in the art.

The Examiner's attention is again directed to page 7, lines 37-40 and page 11, lines 31-37. Further, as noted on page 2,

lines 28-36, the A/D converter samples the image data to generate a digital representation of the video image sensor analog output signal. A predetermine number of digital samples comprise one frame. The digitized output signal(s) from the A/D converter(s) is then compressed and stored by the controller. As discussed on page 5, lines 34-41, the support electronics include clock generator which is coupled to the A/D converter to permit the sensor output to be sampled at predetermined intervals to generate a digital representation of the sensor output. This predetermined number of samples comprise a frame. As discussed on page 12, lines 30-33 in the event that the adaptive sampling is employed, the sampling rate of the A/D converter (i.e. the rate at which samples are taken to form a single frame or image) is adjusted, thereby modifying the resolution of the images provided to the processor and hence of the images stored in the memory.

not claimed in independent claims

Nishijima also lacks any teaching or suggestion of the user activated capture switch or a control processor which stores only a predetermine amount of data after activation of the capture switch as required by claim 4. Rather, Nishijima explicitly teaches that recording stops either when intentionally terminated or when the end of the magnetic tape is reached (see, for example, column 5, lines 58-64). Although, as disclosed in the reference text, the user can input the conditions and requirements for various compression and /or recording modes, such as programming the controller so that video signals are always continually recorded, there is nothing within the referenced text that suggest that a user can activate a switch and thereby limit the amount of subsequently stored data as required by claim 4.

The limitations of claim 8 are also lacking in Nishijima because the different compression ratios of Nishijima do not

relate to different image resolutions as has been discussed above.

With regards to claims 18 and 36, the referenced text relates to error correction and variable length encoding, and has nothing whatsoever to do with the required encryption.

Claim 34 requires that the control processor purge the contents of the memory upon user activation of a switch. The text of Nishijima referred to by the Examiner lacks any suggestion of such a switch or control processor. Further the Examiner's contention that the RAM is purged upon activation of an on-off switch is unsupported by the referenced text, which fails to disclose any such switch. Further, even if there were such a switch, presumably back-up power would be provided to maintain the data in the RAM and meet Nishijima's objectives.

The distinguishing features of claims 35 and 43 should be clear from the above.

Claim 40 requires that the control processor store only a pre-determined amount of data following an event. The referenced text in Nishijima simply indicates that different compression ratios and frame rates may be utilized, and lacks any disclosure of pre-determining the amount of data which will be stored after an event.

The previously submitted traversal arguments regarding the rejections of claims 13 and 14 remain fully applicable. Accordingly, these arguments are not documented again here, but the Examiner is respectfully requested to review the Appeal Brief in his regard.

Claims 1-4, 15 and 44 stand rejected under 35 USC §102(b) as anticipated by Gustin (U.S. Patent No. 5,056,056). Claim 45 stands rejected under 35 USC §103(a) as obvious over Gustin. The rejections are respectfully traversed.

Gustin discloses a system for sensing various operational parameters and is also similar to the above discussed Coiner reference. In particular, Gustin is directed to sensing non-image data (such as pressure or acceleration data) associated, for example, with crash test of vehicles. As discussed in column 4, lines 9-60, according to Gustin data is continuously written into memory until a start signal is generated in response to a triggering event. The triggering event is described to occur when the received data exceeds some predetermine threshold. The start signal is generated based on either a user input or the input data itself. Responsive to the start signal, a trigger timer is set which controls the proportion of data recorded before and after the triggering event. The data acquisition rate may be adjusted so that, for example, sensed pressures or accelerations that are stored have a variable periodicity.

It is noted that Gustin lacks any disclosure or suggestion of acquiring image data, and accordingly has no need for and lacks any disclosure of image resolution. Hence, Gustin lacks the required storing of image data at different image resolutions, as required by claims 1 and 15.

Further as discussed above, Gustin discloses only the use of data sensors. In the referenced sections of column 4, Gustin expressly discloses that there is no second sensor type for generating a signal representing an event. Rather the processor generates a signal representing the event based upon a threshold being exceeded by the data being stored. Accordingly Gustin lacks any teaching or suggestion of the limitations of claim 2.

Since Gustin lacks the required second sensor type of claim 2, it also lacks any teaching or suggestion that such a sensor type be an accelerometer. Gustin's acceleration sensor outputs

data for storage rather than outputting a signal representing an event, as required by claim 3.

With regard to claim 44, as discussed above Gustin lacks, *inter alia*, the required storage of images having different resolutions and the second sensor type.

With regard to claim 45, it is respectfully submitted that Gustin lacks, *inter alia*, the required user activated purge switch and still switch.

With regards to the purge switch, the Examiner asserts that although Gustin discloses a memory backup to ensure that recorded data are not purged when power is turned off, somehow the user could turn off power to the backup memory to purge the memory. It is respectfully submitted that this is pure speculation on the Examiner's part. The Examiner is respectfully requested to provide further detailed explanation of the rationale for the asserted conclusion if the rejection is to be maintain.

With regard to still recording, the Examiner asserts that "If a user activated still recording of a single data sample as claimed is desirable, it is viewed that such capability is obvious in view of Gustin since such function is within the confine of the user generated start signal and user selected recording time and recording rate as disclosed in Gustin". The rationale for the Examiner's assertion is neither understood nor supported by the Gustin disclosure. It is respectfully submitted that the Examiner is using hindsight to reconstruct the invention in accordance with the present application disclosure. Accordingly, if the rejection is to be maintained a further detailed explanation of the Examiner's rationale for the asserted conclusion is respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance and an early

indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed local telephone number, in order to expedite resolution of any remaining issues and further to expedite passage of the application to issue, if any further comments, questions or suggestions arise in connection with the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 12-0429 and please credit any excess fees to such deposit account.

Respectfully submitted,

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CLAIM AMENDMENT APPENDIX

WITH

ADDITIONS UNDERLINED (_) AND DELETIONS BRACKETED ([])

Please amend claims 1-2, 7, 15, 19, 37-39, and 44 as follows:

1.(Twice Amended) A recording device for capturing data, said recording device comprising:

at least one memory for storing image data associated with a time period; and

a control processor operative to store the data in the at least one memory;

wherein each image represented by [such that] the stored data associated with a portion of the time period closer to an event has a first image resolution and each image represented by the stored data associated with a portion of the time period further from the event has a second image resolution different than the first resolution.

2.(Twice Amended) The device of claim 1, wherein said device further comprises:

at least one first sensor type operative to generate the data; and

at least one second sensor type operative to generate a signal representing the event;

wherein [the control processor operates to store the data such that] each image represented by the stored data associated with the portion of the time period closer to the event has the first resolution responsive to the signal.

7. (Twice Amended) The device of claim 1, wherein:

the data is video data; and

[said processor is further operative to store] the data stored in said memory [at] has a first frame rate prior to the event and [at] has a second frame rate subsequent to the event.

15. (Twice Amended) A method for recording data, comprising the steps of:

storing first image data associated with a time period closer to an event, wherein each image represented by the stored first image data has [so as to have] a first image resolution; and

storing second image data associated with a time period further from said event, wherein each image represented by the stored second image data has [so as to have] a second image resolution different than the first resolution.

19. (Twice Amended) The method of claim 15, [further comprising the steps of] wherein:

the stored first data is first video data and the stored second data is second video data;

[storing] said stored first video data [at] has a first frame rate [prior to said event]; and

[storing] said stored second video data [at] has a second frame rate [subsequent to said event].

37. (Amended) The device of claim 1, further comprising:

a sampler operative to sample data representing each image associated with the portion of the time period closer to the event at a first image sampling rate to generate the image data which represents each image at the first resolution and to sample data representing each image associated with the portion of the time period further from the event at a second image sampling rate to generate the image data which represents each

image at the second resolution [wherein the first and the second resolutions are at least one of temporal resolutions and spatial resolutions].

38.(Amended) The device of claim 1, wherein [the first and the second resolutions are spatial resolutions and] the control processor is operative to compress the data associated with the portion of the time period closer to an event at a first compression ratio and the data associated with the portion of the time period further from an event at a second compression ratio different than the first compression ratio.

39.(Amended) The [device] method according to claim [1] 15, further comprising the step of:

sampling data representing each image associated with the portion of the time period closer to the event at a first image data sampling rate to generate the first image data; and

sampling data representing each image associated with the portion of the time period further from the event at a second image data sampling rate to generate the second image data [wherein the first and the second resolutions are temporal resolutions and the control processor is operative to store, on a per unit of time basis, more of the data associated with the portion of the time period closer to an event and less of the data associated with the portion of the time period further from an event].

44.(Amended) A compact portable device for recording data with no moving parts, said recording device comprising:

at least one first sensor type operative to generate image data associated with a period of time;

at least one second sensor type operative to generate a signal representing an event;

at least one circular buffer memory for storing the data;

a control processor operative to receive the signal representing the event and to store the data in the at least one circular buffer memory, wherein each image represented by [such that] the stored data associated with a portion of the time period after receipt of the event signal has a first image resolution and each image represented by the stored data associated with a portion of the time prior to receipt of the event signal has a second image resolution lower than the first resolution;

a portable housing configured to house the control processor and the memory; and

at least one connector disposed on said housing for outputting the stored data.